

## ABSTRACT

In the hologram recording and hologram-record reproduction using a one-dimensional optical modulator, the one-dimensional optical modulator where a plurality of light-modulating pixels are arranged modulates a laser beam to record a digital-data signal on a hologram recording medium, and part of the light-modulating pixels record sync signals in two or more positions on the hologram recording medium with retaining a predetermined interval, thereby improving hindrance to reproduction or readout of information recorded on the hologram recording medium, a decrease in S/N, and so on due to deformation or the like of the hologram recording medium.